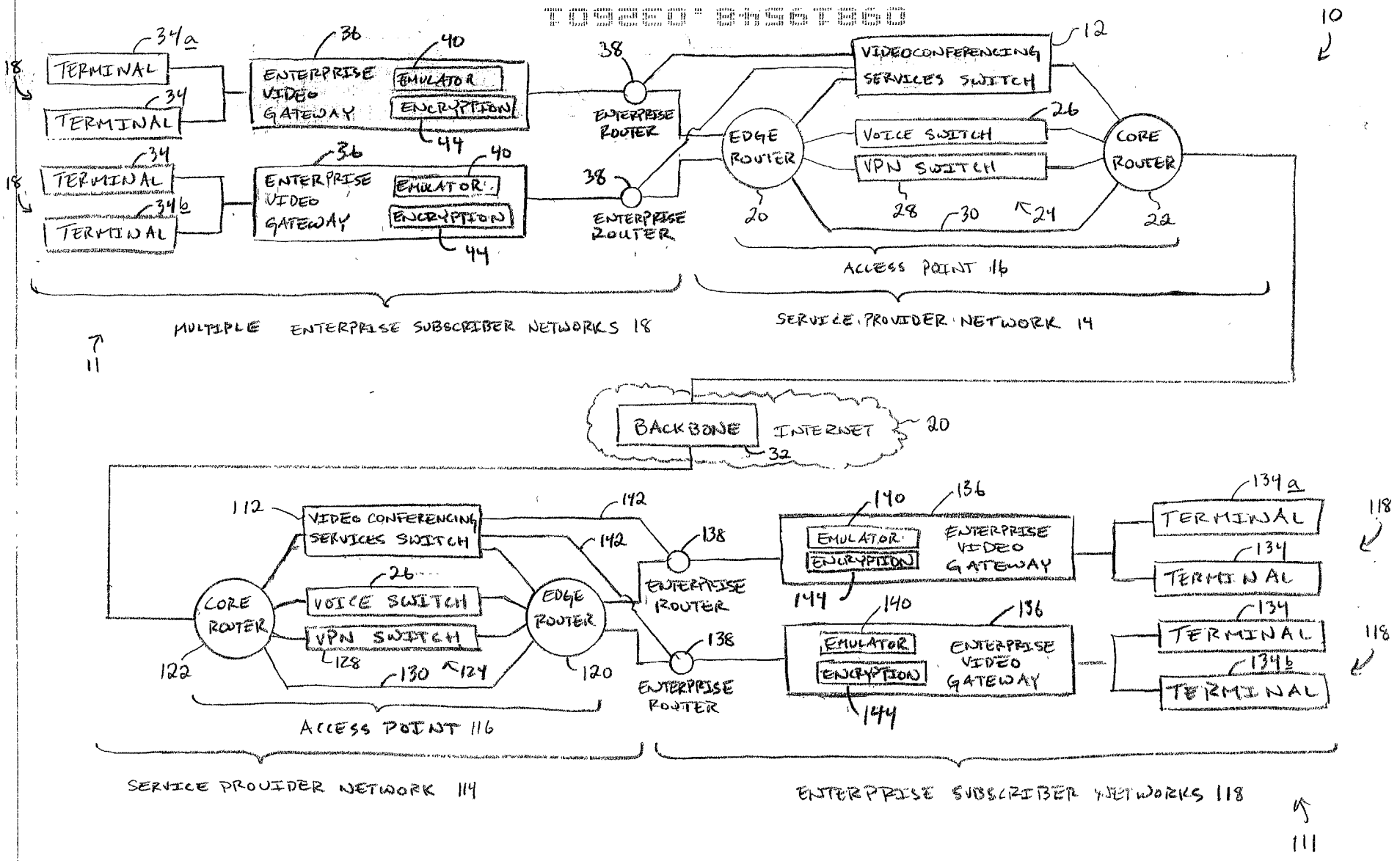

10
18
TERMINAL
34a
TERMINAL
34
TERMINAL
34
TERMINAL
34b
ENTERPRISE VIDEO GATEWAY
36
EMULATOR
40
ENCRYPTION
44
ENTERPRISE VIDEO GATEWAY
36
EMULATOR
40
ENCRYPTION
44
38
ENTERPRISE ROUTER
38
ENTERPRISE ROUTER
VIDEOCONFERENCING SERVICES SWITCH
12
EDGE ROUTER
20
VOICE SWITCH
26
VPN SWITCH
28
30
24
CORE ROUTER
22
ACCESS POINT 16
MULTIPLE ENTERPRISE SUBSCRIBER NETWORKS 18
SERVICE PROVIDER NETWORK 14
11
BACKBONE
INTERNET
32
20
112
VIDEO CONFERENCING SERVICES SWITCH
142
142
138
ENTERPRISE ROUTER
138
ENTERPRISE ROUTER
140
136
EMULATOR
ENCRYPTION
144
ENTERPRISE VIDEO GATEWAY
140
136
EMULATOR
ENCRYPTION
144
ENTERPRISE VIDEO GATEWAY
134a
TERMINAL
134
TERMINAL
134
TERMINAL
134b
TERMINAL
118
118
CORE ROUTER
122
26
VOICE SWITCH
VPN SWITCH
128
130
124
EDGE ROUTER
120
ACCESS POINT 116
SERVICE PROVIDER NETWORK 114
ENTERPRISE SUBSCRIBER NETWORKS 118
111

FIG. 1

10529201 "3465152"

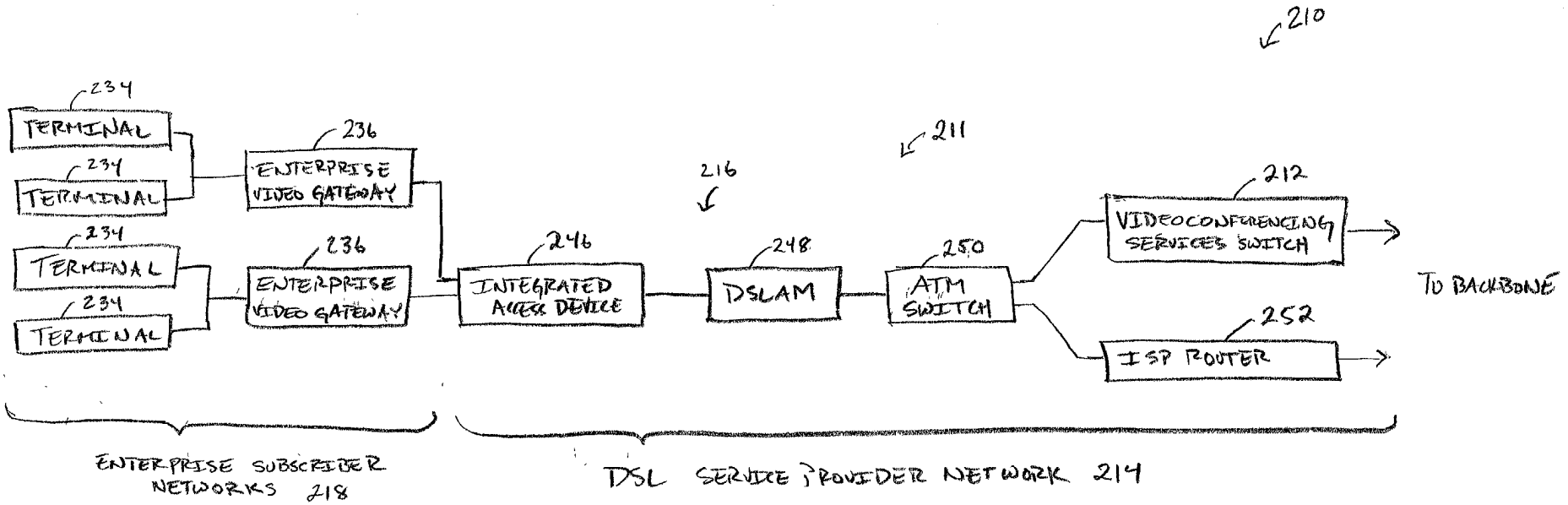
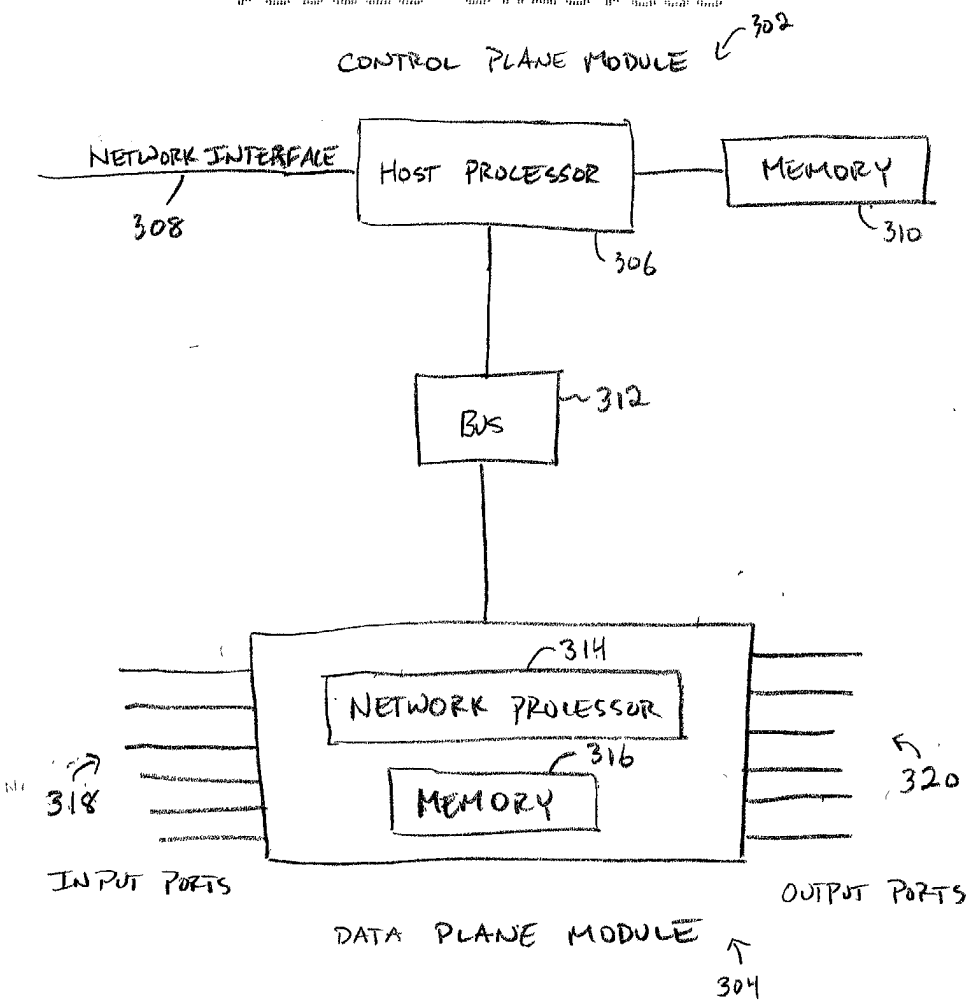


Fig 2



VIDEOCONFERENCING SERVICE SWITCH

FIG. 3

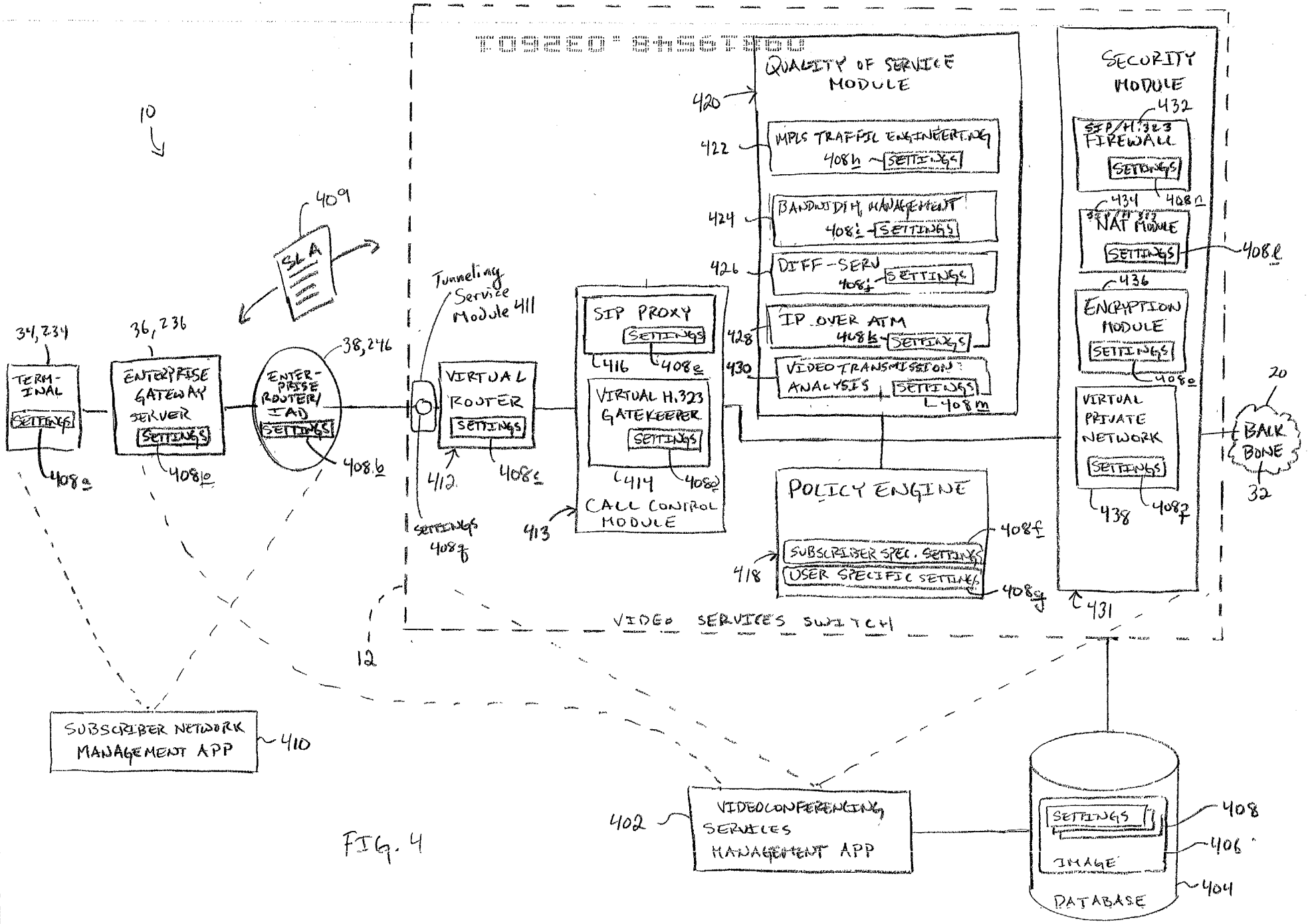

10
VIDEO SERVICES SWITCH
QUALITY OF SERVICE MODULE
420
MPLS TRAFFIC ENGINEERING
408h
SETTINGS
422
BANDWIDTH MANAGEMENT
408i
424
DIFF-SERV
408j
426
IP OVER ATM
408k
428
VIDEO TRANSMISSION ANALYSIS
408m
430
SECURITY MODULE
SIP/H.323 FIREWALL
432
408n
NAT SIP/H.323 MODULE
434
408l
ENCRYPTION MODULE
436
408o
VIRTUAL PRIVATE NETWORK
438
408p
431
SIP PROXY
416
408e
VIRTUAL H.323 GATEKEEPER
414
408d
CALL CONTROL MODULE
413
VIRTUAL ROUTER
408c
412
Tunneling Service Module 411
SETTINGS
408g
POLICY ENGINE
SUBSCRIBER SPEC. SETTINGS
408f
USER SPECIFIC SETTINGS
408q
418
TERMINAL
34, 234
408a
ENTERPRISE GATEWAY SERVER
36, 236
408b
ENTERPRISE ROUTER/IAD
38, 246
408b
SLA
409
BACK BONE
20
32
SUBSCRIBER NETWORK MANAGEMENT APP
410
12
VIDEOCONFERENCING SERVICES MANAGEMENT APP
402
SETTINGS
IMAGE
DATABASE
408
406
404

FIG. 4

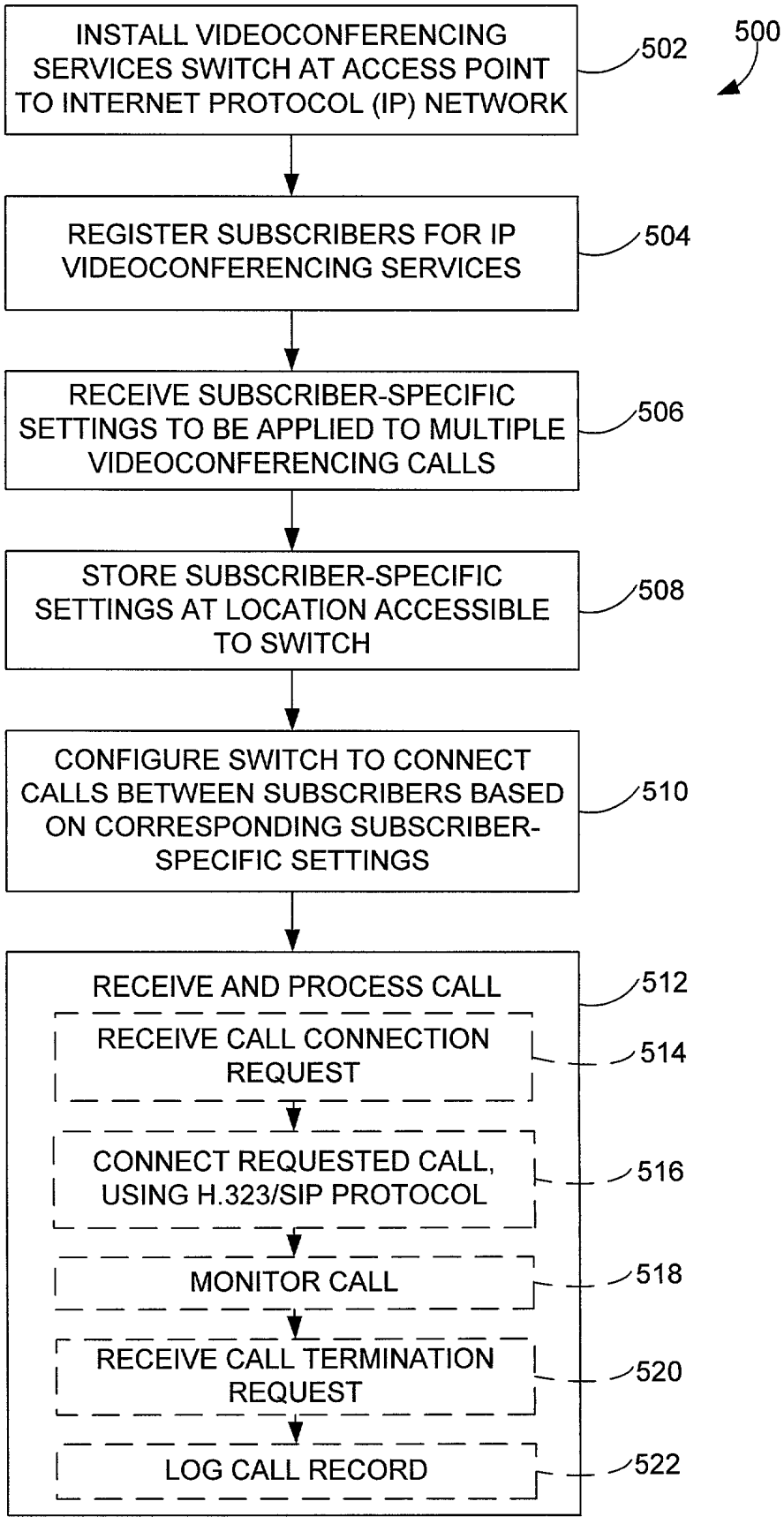

500
INSTALL VIDEOCONFERENCING SERVICES SWITCH AT ACCESS POINT TO INTERNET PROTOCOL (IP) NETWORK
502
REGISTER SUBSCRIBERS FOR IP VIDEOCONFERENCING SERVICES
504
RECEIVE SUBSCRIBER-SPECIFIC SETTINGS TO BE APPLIED TO MULTIPLE VIDEOCONFERENCING CALLS
506
STORE SUBSCRIBER-SPECIFIC SETTINGS AT LOCATION ACCESSIBLE TO SWITCH
508
CONFIGURE SWITCH TO CONNECT CALLS BETWEEN SUBSCRIBERS BASED ON CORRESPONDING SUBSCRIBER-SPECIFIC SETTINGS
510
RECEIVE AND PROCESS CALL
512
RECEIVE CALL CONNECTION REQUEST
514
CONNECT REQUESTED CALL, USING H.323/SIP PROTOCOL
516
MONITOR CALL
518
RECEIVE CALL TERMINATION REQUEST
520
LOG CALL RECORD
522

FIG. 5

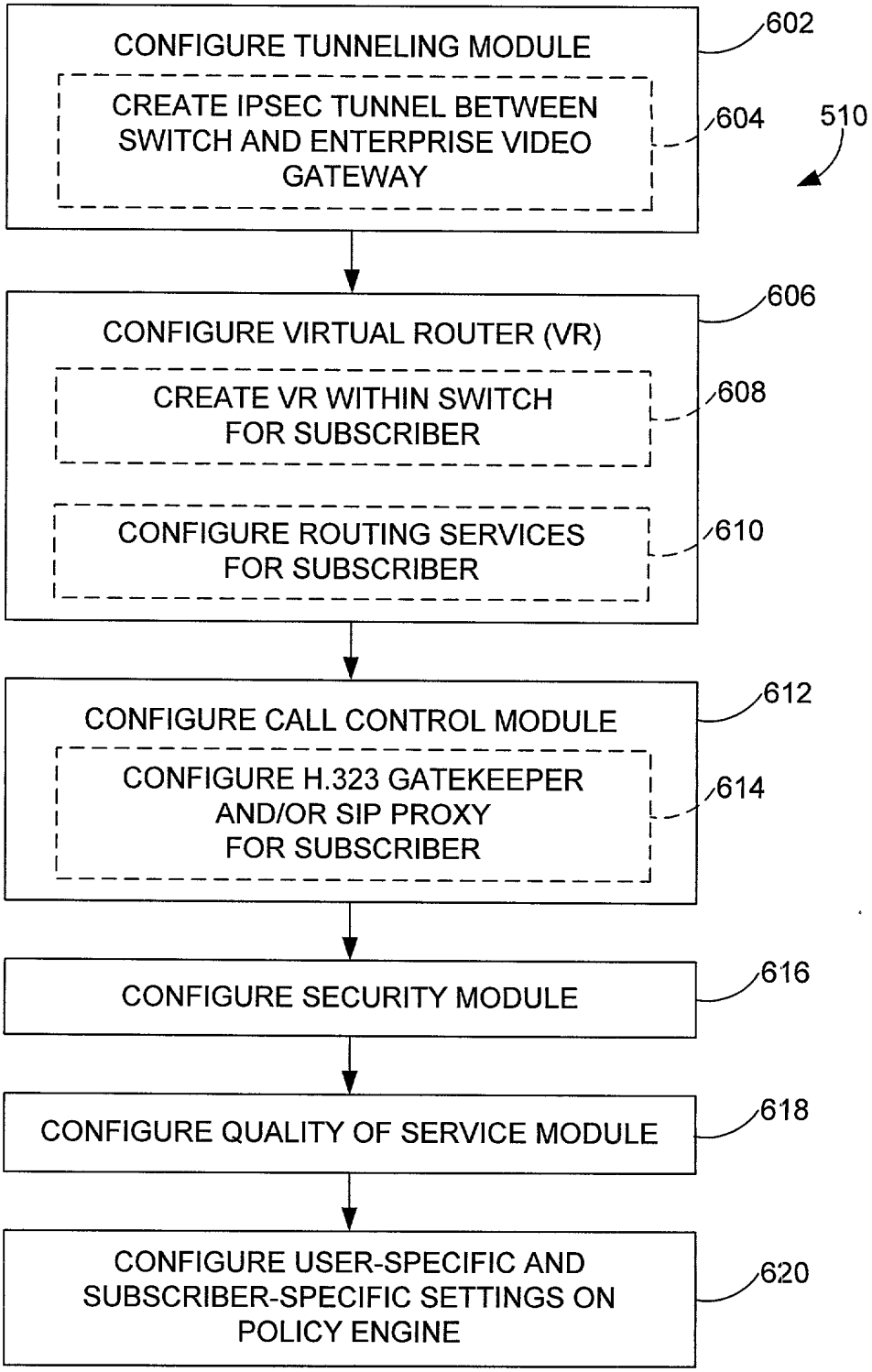

CONFIGURE TUNNELING MODULE
602
CREATE IPSEC TUNNEL BETWEEN SWITCH AND ENTERPRISE VIDEO GATEWAY
604
510
CONFIGURE VIRTUAL ROUTER (VR)
606
CREATE VR WITHIN SWITCH FOR SUBSCRIBER
608
CONFIGURE ROUTING SERVICES FOR SUBSCRIBER
610
CONFIGURE CALL CONTROL MODULE
612
CONFIGURE H.323 GATEKEEPER AND/OR SIP PROXY FOR SUBSCRIBER
614
CONFIGURE SECURITY MODULE
616
CONFIGURE QUALITY OF SERVICE MODULE
618
CONFIGURE USER-SPECIFIC AND SUBSCRIBER-SPECIFIC SETTINGS ON POLICY ENGINE
620

FIG. 6

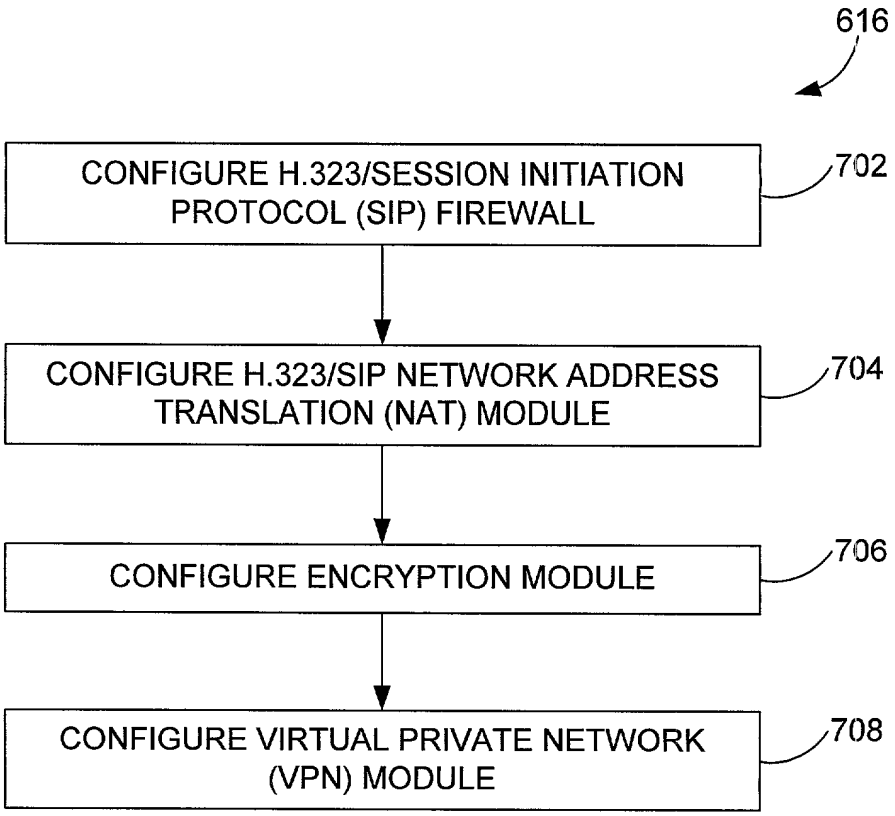

616
CONFIGURE H.323/SESSION INITIATION PROTOCOL (SIP) FIREWALL
702
CONFIGURE H.323/SIP NETWORK ADDRESS TRANSLATION (NAT) MODULE
704
CONFIGURE ENCRYPTION MODULE
706
CONFIGURE VIRTUAL PRIVATE NETWORK (VPN) MODULE
708

FIG. 7

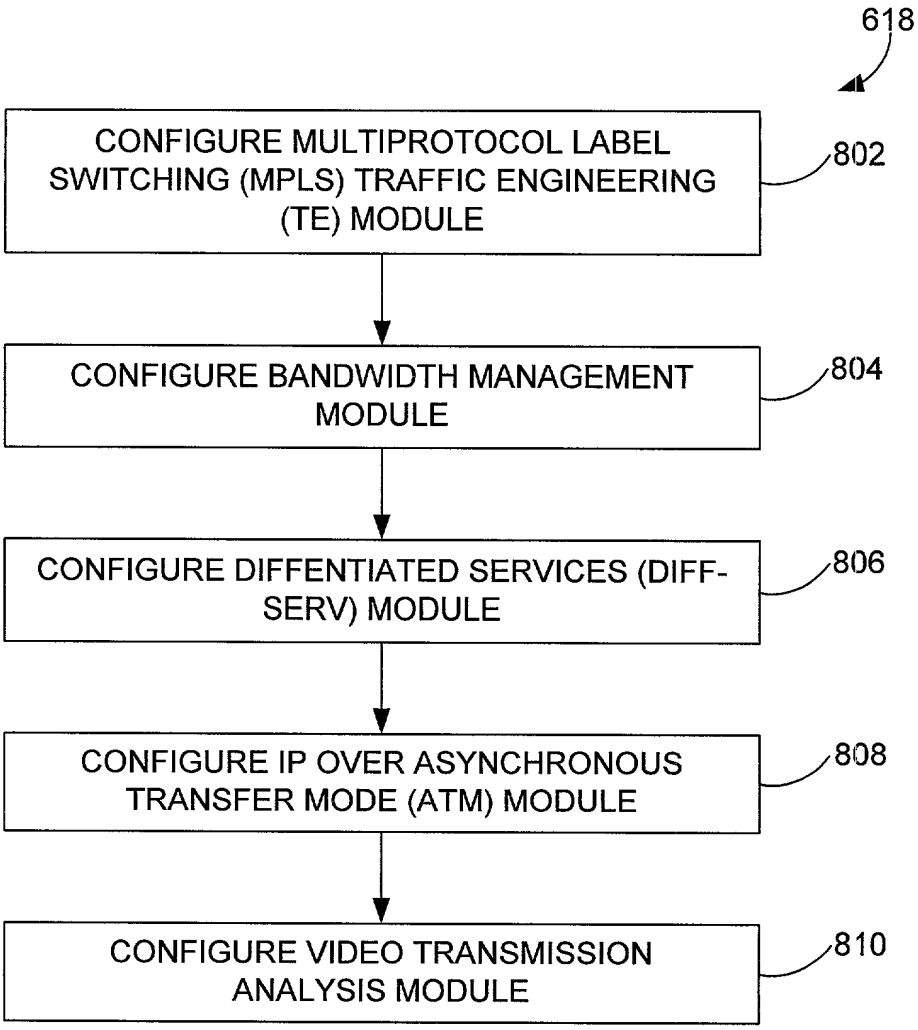

618
CONFIGURE MULTIPROTOCOL LABEL SWITCHING (MPLS) TRAFFIC ENGINEERING (TE) MODULE
802
CONFIGURE BANDWIDTH MANAGEMENT MODULE
804
CONFIGURE DIFFENTIATED SERVICES (DIFF-SERV) MODULE
806
CONFIGURE IP OVER ASYNCHRONOUS TRANSFER MODE (ATM) MODULE
808
CONFIGURE VIDEO TRANSMISSION ANALYSIS MODULE
810

FIG. 8

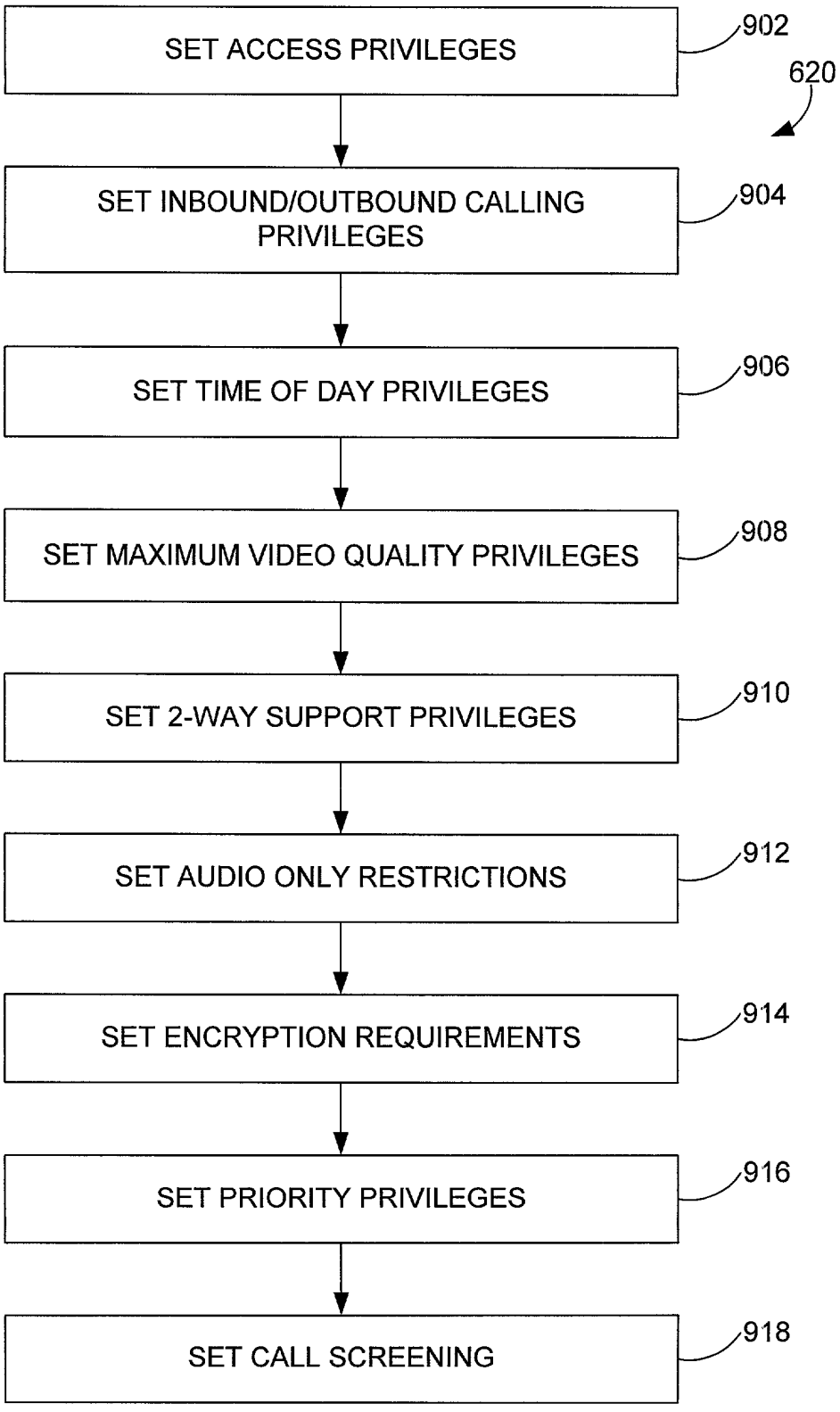

SET ACCESS PRIVILEGES
902
620
SET INBOUND/OUTBOUND CALLING PRIVILEGES
904
SET TIME OF DAY PRIVILEGES
906
SET MAXIMUM VIDEO QUALITY PRIVILEGES
908
SET 2-WAY SUPPORT PRIVILEGES
910
SET AUDIO ONLY RESTRICTIONS
912
SET ENCRYPTION REQUIREMENTS
914
SET PRIORITY PRIVILEGES
916
SET CALL SCREENING
918

FIG. 9

Enterprise Video Gateway

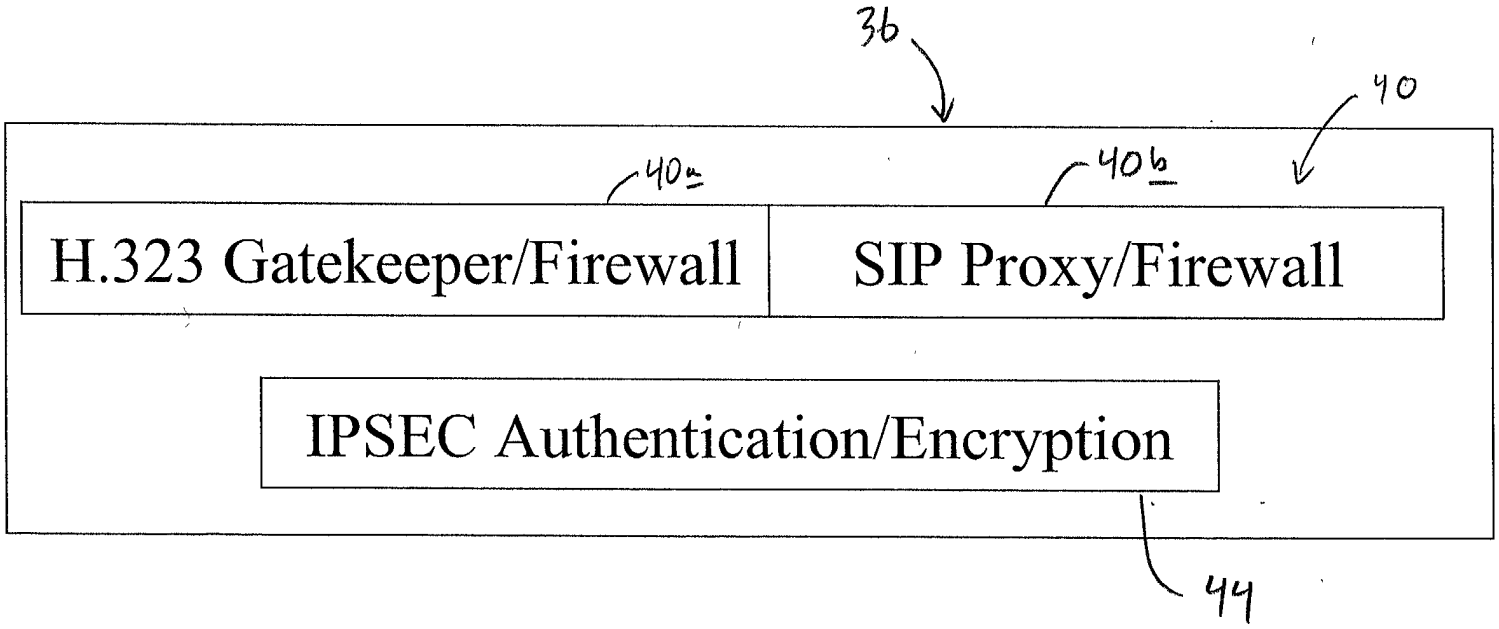


FIG. 10